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My darling little ones, she cries,
Will pine in want—for, Kitty's gone !
She's gone ! oh, Heavens ! who ? Kitty gone !
That softest, sweetest, gentlest form,
Lifeless extended, cold and wan,
Whom Nature grac'd with every charm.

Yes ! in the dark, unconscious tomb,
The last abode to man assigned ;
Where silence reigns and awful gloom !
The Blue-eyed Virgin's form you'll find

T. W. E.

SELECT POETRY.

STANZAS

TO THE MEMORY OF *ROBERT BOURNE** ESQ. BY DAVID CAREY, ESQ. AUTHOR OF "THE PLEASURES OF NATURE," &C.

He possessed a mind richly imbued with sound learning and Christian principles, joined to great and active benevolence, which could only be exceeded by that of his estimable friend, Dr. Robert Anderson, of Edinburgh, author of the "Lives of the British Poets," in whose house he had resided for some time, and who accompanied him on his visit to Ireland.

WHEN the Warrior expires on his path of renown
The tears of a Nation embalm his repose,
Though Mercy ne'er hallowed and Pity disown
The breast that ne'er felt her compassionate throes.

But when Worth, modest Worth, like a star beam that fell,
Is withdrawn to his own empyrean of light,
How few, ah, how few! round his cold earthly cell
Heave the deep sigh of sorrow, and weep for his flight !

Yet bosoms there are, O ! the dearest, the best,
(And may heaven on their path shed its loveliest beam)
Who soothe the lone wanderer's pulses to rest,
And weep with a dear and a lasting esteem.

And such o'er thy doom, lov'd unfortunate BOURNE !
On sad sister shores, breathe the sigh of regret ;
For thy virtues the Good and the Virtuous mourn,
Ah ! memorials sweet ! they shall never forget.

As some bark that has glean'd, as she travers'd the deep,
The gems of the Orient, the pride of the wave,
Hails, joyfully hails, lovely Albion's green steep,—
When loud roars the tempest, and deep yawns the grave ;

So gaily we saw thee on Life's summer sea,
The regions of Science and Fancy explore,
Then seek each fond scene dear to friendship and thee,
And breathe thy last sigh on thy lov'd native shore.

When the blooms of thy mind, like the spring, met the eye,
How bright was the prospect that fancy pourtray'd !—
Now faded, ah ! faded for ever, they lie
Where the green turf of Erin now covers thy head !

And Friendship his fond ineffectual care
Bewails, as he lingers and sighs to depart ;
And Piety weeps, 'mid her holiest prayer,
For a child that was lovely and dear to her heart.

'Tis thus as we journey Life's dark valley through,
Bright sun beams of hope oft illumine the road ;—
How brightly, alas ! but how transient too !
For love, hope, and joy, find one gulphing abode.

But pass undismay'd, O ye righteous ! the bound ;
Though dim, mark the vista that opens afar !
On the ruins of Time, o'er the darkness profound,
Salvation has lighted her bright morning star ;

And the Cherubim train their glad welcome extending,
Heaven's triumph recording, her loud organ blow,
For a soul from the confines of darkness ascending,
That has trod the lone blood-press of Death and of Wo !

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* Fourth Son of the Rev. Richard Bourne, of Dublin, who died at Kildress, in the county of Tyrone, on the 8th of June, 1809, in the 24th year of his age.

Then weep not the pleasures so fading and dear,
For the handmaids of bliss in yon starry abode,
Shall wipe from your eyes the disconsolate tear,
And ray on your pathway the smiles of your God.

FOREIGN LITERATURE.

PROCEEDINGS OF THE FRENCH NATIONAL INSTITUTE.

THE class of mathematical and physical sciences has proposed the following prize question:

The first inquiries concerning sound, date very high in antiquity. The proportion of the length of strings producing different notes, are said to have been found by Pythagoras; but this branch of science made no remarkable progress before the end of the seventeenth century. Sauveur, a member of the French Academy of Sciences, showed by very ingenious experiments, that the sounding cord was divided into different waves, separated by knots, or points of rest, and he determined the absolute number of vibrations that constitute each note, deduced in the first place from delicate and *curious experiments*, which he compared afterward with the algebraic formulæ derived from the theory of the centres of oscillation; as appears in the memoirs of the Academy, for 1713.

Taylor, in his *Methodus Incrementorum*, published 1717, treated the problem more profoundly on the hypothesis, that the forces acting on the material points of the system are proportional to their distances from a right line drawn from one fixed point to the other, so that these points all arrive at the right line at the same time. Twenty or thirty years after this, Daniel Bernoulli, farther developed the theory of Taylor; but for the general and strict solution of the problem we are indebted to d'Alembert and Euler. These great geometricians first employed the differential equation of the motion of the sonorous chord, which is with partial differences, and of the second order. This equation was first found and summed up by d'Alembert, but Euler was more fully aware of its universality.

An equation of the same order is applicable to the oscillations of air in tubes, and does not change, when from the case of the simple line we proceed to cases of two or three dimensions.

In the problems of which we are speaking the order of the differential equation of the motion is connected with the manner in which we consider the effects of elasticity in the body moved. It has been here applied to a chord stretched between two points. If the chord be let loose at one of these points, and be perfectly flexible, it is incapable of producing any acoustic phenomenon.

It is otherwise if the chord be a spring. In this case, confining it if you please to a single fixed point, the spring set to vibrate will produce a perceptible sound, if its oscillations exceed twenty-four per second; but the differential equation of this movement will be of the fourth order. The first problem may be considered as a particular case of the second, abstracting the spring; but the converse does not hold.

This essential difference between the questions of the movement, considered in each of these points of view, in the case of a simple line, leads us immediately to conceive that we must find differences of the same kind, and also a great increase of difficulties, when we introduce two dimensions into the calculation. The acoustic phenomena produced by parchment stretched, as on a drum-head, are referrible to those of the chord; the phenomena of metallic plates, to those of the spring.

Euler, in his paper *de Motu vibratorio Tympanorum*, has considered the parchment as composed of threads crossing each other at right angles. A geometrician of the Institute has published in one of its volumes some researches into this subject, contemplating it in the same point of view. The differential equation of the motion,